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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,515	09/02/2005	Stefan Kluge	2732-165	7863
6449 7590 03/26/2007 ROTHWELL, FIGG, ERNST & MANBECK, P.C. 1425 K STREET, N.W. SUITE 800 WASHINGTON, DC 20005			EXAMINER LAWSON, MATTHEW P	
			ART UNIT	PAPER NUMBER
			2871	

SHORTENED STATUTORY PERIOD OF RESPONSE	NOTIFICATION DATE	DELIVERY MODE
3 MONTHS	03/26/2007	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PTO-PAT-Email@rfem.com

Office Action Summary	Application No.	Applicant(s)	
	10/525,515	KLUGE, STEFAN	
	Examiner	Art Unit	
	Matthew P. Lawson	2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>24 Feb 2005</u> | 6) <input checked="" type="checkbox"/> Other: <u>Foreign Ref.</u> |

DETAILED ACTION

Status of the Application

1. **Claims 1-13** are pending in this application.
2. If applicant is aware of any prior art or any co-pending application not already on record, the applicant is reminded of his/her duty under 37 C.F.R. §1.56 to disclose the same.

Priority

3. Applicant's claim for the benefit of a prior-filed application under 35 U.S.C. 119(e) or under 35 U.S.C. 120, 121, or 365(c) is acknowledged.
4. Certified copies of the foreign priority documents have been received in this national stage application from the International Bureau.

Information Disclosure Statement

5. The information disclosure statement (IDS) was filed on 24 February 2005. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Claim Objections

6. **Claims 11-13** are objected to because of the following informalities: "said display device" should be corrected to mean --said portable data carrier with display device--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. **Claims 6-9 and 12** are rejected under 35 U.S.C. 102(b) as being anticipated by Arai et al (Arai), Japanese Laid-Open Patent Application Publication No. 11-120312.

9. Regarding claims 6 and 12, Arai discloses a chip card (i.e. portable data carrier) with a display device, comprising:

- a. a card body (10a) with conductive paths (21) disposed in the interior of the card;
- b. a recess located on a top side of the card, which accommodates a display (12);
- c. countercontact surfaces (24) in the recess, which are formed by the conductive paths and which are contacted to contact surfaces (3) of the display; and
- d. a reflection layer (8) applied onto a base surface of the recess (Abstract; Figs 2, 4, 5, 7, 8).

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10. Arai further discloses the contact surfaces of the display to be directed towards the base surface of the recess. Specifically, the contact surfaces as disclosed by Arai are formed on transparent conductive layer (3), and are thereby directed towards the base surface of the recess (Figs 2, 4, 5, 7, 8).

11. Regarding claim 7, Arai further discloses the recess to be formed in a multi-step fashion, wherein the countercontact surfaces are formed on a step of the multi-step recess disposed between a top side of the card and a base surface, and wherein the display has a corresponding step with the contact surfaces formed thereon.

12. Specifically, the corresponding step as disclosed by Arai is formed by the extension of substrate (2) over substrate (5), and the contact surfaces are formed on transparent conductive layer (3) (Figs 2, 4, 5, 7, 8).

13. Regarding claim 8, Arai further discloses the contact surfaces and countercontact surfaces to be connected with an anisotropic conductive adhesive (20) (Fig. 5; ¶ [0057]).

14. Regarding claim 9, Arai also discloses the display to be flush with the top said of the card (Figs 2, 4, 5, 7, 8).

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. **Claims 1-4, 10, 11 and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Arai in view of Gundlach et al. (Gundlach), US PGPub No. 2003/0073327 A1.

17. Regarding claims 1 and 11, Arai discloses a chip card with a display device, said chip card comprising:

- a. a semifinished product (10a) with conductive paths (21) disposed in the interior;
- b. a recess in the semifinished product;
- c. countercontact surfaces (24) of the conductive paths in the recess;
- d. a display (12) inserted into the recess so that:
 - i. the reflection layer (8) is applied to a base surface of the recess, and
 - ii. the display and the reflective layer form a reflective display; and
- e. countercontact surfaces (25) contacted with the contact surfaces of the display (Arai, Figs 2, 4, 5, 7, 8).

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18. The claimed method merely recites the steps of providing, producing, etc. the claimed elements, thereby producing a chip card with a display. Since each element must be formed to produce the chip card, Arai discloses the above claimed method steps.

19. But Arai fails to expressly disclose the countercontact surfaces to be uncovered, or the step of uncovering the countercontact surfaces.

20. However, Gundlach discloses a chip card with an optional display, wherein the conductive tracks in the interior of the chip card, and hence the counter contacts for the optional display are uncovered. Specifically, Gundlach discloses the electrical components to be accessible from the top side of the card, and a layer to have a cutout at the locations of the electrical contacts (Gundlach, ¶ [00024-0029, 0047]; Figs. 3 and 4).

21. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make use of uncovered countercontact surfaces, as taught by Gundlach, in the chip card of Arai, in order to have a chip card with a display that has a construction as simple as possible (Gundlach, ¶[0026]).

22. Regarding claim 2, Arai further discloses the recess to be formed in a multi-step fashion, wherein the countercontact surfaces are formed on a step of the multi-step recess disposed between a top side of the card and a base surface, and wherein the display has a corresponding step with the contact surfaces formed thereon.

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23. Specifically, the corresponding step as disclosed by Arai is formed by the extension of substrate (2) over substrate (5), and the contact surfaces are formed on transparent conductive layer (3) (Arai, Figs 2, 4, 5, 7, 8).

24. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the recess formed in a multi-step fashion in the chip card as taught by the combination of Arai and Gundlach, in order to reduce the number of components and simplify manufacture (Arai, ¶ [0015, 0064]).

25. Regarding claim 3, Arai further discloses the contact surfaces and countercontact surfaces to be connected with an anisotropic conductive adhesive (20) (Arai, Fig. 5; ¶ [0057]).

26. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the contact surfaces and countercontact surfaces be connected with an anisotropic conductive adhesive in the chip card as taught by the combination of Arai and Gundlach, in order to reduce the number of components and simplify manufacture (Arai, ¶ [0015, 0064]).

27. Regarding claim 4, Arai also discloses the display to be flush with the top said of the card (Arai, Figs 2, 4, 5, 7, 8).

28. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the display to be flush with the top said of the card

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in the chip card as taught by the combination of Arai and Gundlach, in order to reduce the number of components and simplify manufacture (Arai, ¶ [0015, 0064]).

29. Regarding claims 10 and 13, Arai discloses a chip card with a display device, said chip card comprising:

- a. a semifinished product (10a) with conductive paths (21) disposed in the interior;
- b. a display (12) with a bottom carrier substrate (2), a conductive path layer (3) on which are formed contact surfaces for connecting to countercontact surfaces, as well as a top carrier substrate (2');
- c. a reflection layer (8) applied to the top carrier substrate of the display;
- d. a recess in the semifinished product;
- e. countercontact surfaces (24) of the conductive paths in the recess; and
- f. the display (12) inserted into the recess so that the reflection layer rests on the base surface of the recess and at the same time contact surfaces rest on countercontact surfaces (Figs 2, 4, 5, 7, 8).

30. The claimed method merely recites the steps of providing, producing, etc. the claimed elements, thereby producing a chip card with a display. Since each element must be formed to produce the chip card, Arai discloses the corresponding claimed method steps.

31. But Arai fails to expressly disclose the countercontact surfaces to be uncovered, or the step of uncovering the countercontact surfaces.

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23. However, Gundlach discloses a chip card with an optional display, wherein the conductive tracks in the interior of the chip card, and hence the counter contacts for the optional display are uncovered. Specifically, Gundlach discloses the electrical components to be accessible from the top side of the card, and a layer to have a cutout at the locations of the electrical contacts (Gundlach, ¶ [00024-0029, 0047]; Figs. 3 and 4).

24. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make use of uncovered countercontact surfaces, as taught by Gundlach, in the chip card of Arai, in order to have a chip card with a display that has a construction as simple as possible (Gundlach, ¶[0026]).

13. **Claim 5** is rejected under 35 U.S.C. 103(a) as being unpatentable over Arai in view of Gundlach, as applied to claim 1 above, and further in view of Moedl et al. (Moedl), German Patent No. DE 199 631 65.

14. Claim 1 is unpatentable over the combination of Arai and Gundlach, as discussed above.

15. Arai fails to expressly teach sealing gaps between the recess and the display inserted into the recess with a filling.

16. However, Moedl discloses a chip card including a recessed liquid crystal display wherein the gaps between the liquid crystal display and the recess are filled with a filling of either air or a suitable flexible material (Moedl, col. 5, ln. 65 – col. 6, ln. 5).

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17. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to fill in the gaps as taught by Moedl in the chip card and method of Arai, in order to reduce the danger of fracture when the card is bent (Moedl, col. 5, ln. 65 – col.6, ln.5).

Cited Prior Art

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. For example:

- i. Translation of International Preliminary Examination Report Form PCT/IPEA/409 for PCT Application No. PCT/EP2003/009500.
- ii. US Pat. No. 6,293,470 B1 discloses a chip card with display comprising a layer of reflective electrodes for a liquid crystal display formed within a recess.
- iii. US Pat. No. 6,019,284 discloses a chip card with display wherein the liquid crystal display is formed in a recess.

Conclusion

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew P. Lawson whose telephone number is 571-272-9795. The examiner can normally be reached on Monday through Thursday from 8:00am to 6:00pm EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms, can be reached at 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Matthew P. Lawson,
Assistant Examiner

MPL


ANDREW SCHECHTER
PRIMARY EXAMINER